What is Claimed is:

1. A method for manufacturing a copper electroplating material adapted to be fed as a copper ion supply to a copper plating bath in copper electroplating, comprising the step of:

heating basic copper carbonate to a temperature of 250℃ to 800℃ in an atmosphere which is not rendered reductive to carry out thermal decomposition of the basic copper carbonate, to thereby produce easily dissolved copper oxide constituting the copper electroplating material.

2. A method for manufacturing a copper electroplating material adapted to be fed as a copper ion supply to a copper plating bath in copper electroplating, comprising the step of:

heating basic copper carbonate to a temperature of 250℃ to 800℃ in an atmosphere which is not rendered reductive to carry out thermal decomposition of the basic copper carbonate, to thereby produce easily dissolved copper oxide; and

washing the easily dissolved copper oxide with water to provide the copper electroplating material.

3. A method as defined in claim 1 or 2, wherein the basic copper carbonate is obtained by mixing an aqueous solution of a copper salt selected from the group consisting of copper chloride, copper sulfate and copper nitrate and an aqueous solution of carbonate of a material selected from alkaline metal, alkaline earth metal and ammonia(NH_4) with each other, reacting both aqueous solutions with each other while heating them, to thereby deposit a reaction product, and separating the reaction product by filtration.

4. A copper electroplating material fed as a copper ion supply to a copper plating bath in copper electroplating, comprising easily dissolved copper oxide formed by heating basic copper carbonate to a temperature of 250℃ to 800℃ in an atmosphere which is not rendered reductive to subject it to thermal decomposition.

5. A copper electroplating material fed as a copper ion supply to a copper plating bath in copper electroplating, comprising easily dissolved copper oxide formed by heating basic copper carbonate to a temperature of 250℃ to 800℃ in an atmosphere which is not rendered reductive to subject it to thermal decomposition, to thereby obtain a thermal decomposition product and then washing the thermal decomposition product with water.

6. A copper electroplating material as defined in claim 4 or 5, wherein the basic copper carbonate is obtained by mixing an aqueous solution of a copper salt selected from the group consisting of copper chloride, copper sulfate and copper nitrate and an aqueous solution of carbonate of a material selected from alkaline metal, alkaline earth metal

and ammonia(NH_4) with each other, reacting both aqueous solutions with each other while heating them, to thereby deposit a reaction product, and separating the reaction product by filtration.

7. A copper electroplating material as defined in claim 5, wherein the basic copper carbonate is obtained by mixing an aqueous solution of a copper salt selected from the group consisting of copper chloride, copper sulfate and copper nitrate and an aqueous solution of carbonate of a material selected from alkaline metal, alkaline earth metal and ammonia(NH_4) with each other, keeping the mixed solution at a pH within a range of between 7.0 and 9.0, reacting both aqueous solutions with each other while heating them, to thereby deposit a reaction product, and separating the reaction product by filtration.

8. A copper electroplating material as defined in claim 4 or 5, which is fed to a plating bath in which an insoluble anode and a plated object acting as a cathode are arranged.

9. A copper plating method comprising the steps of:

feeding a copper electroplating material as defined in claim 4 or 5 to a plating bath in which an insoluble anode and a plated object acting as a cathode are arranged; and

subjecting the plated object to copper plating.

10. A method for manufacturing a copper electroplating material fed as a copper ion supply to a copper plating bath in copper electroplating, comprising the steps of:

mixing an aqueous cupric chloride solution and an aqueous solution containing a carbonate ion with each other to prepare a mixed solution;

keeping the mixed solution at a pH within a range of between 8.0 and 9.0 and a temperature within a range of between 75℃ and 90℃ to form basic copper carbonate; and

subjecting the basic copper carbonate to solid-liquid separation and washing, so that the basic copper carbonate may have a chlorine concentration of 80ppm or less.

11. A method for manufacturing a copper electroplating material fed as a copper ion supply to a copper plating bath in copper electroplating, comprising the steps of:

mixing an aqueous cupric sulfate solution and an aqueous solution containing a carbonate ion with each other to prepare a mixed solution;

keeping the mixed solution at a pH within a range of between 8.0 and 9.0 and a temperature within a range of between 75℃ and 90℃ to form basic copper carbonate; and

subjecting the basic copper carbonate to solid-liquid separation and

washing, so that the basic copper carbonate may have a SO_4 concentration of 200ppm or less.

12. A method for manufacturing a copper electroplating material fed as a copper ion supply to a copper plating bath in copper electroplating, comprising the steps of:

feeding an aqueous cupric sulfate solution and an aqueous solution containing a carbonate ion to a reaction tank while adjusting a feed ratio between both aqueous solutions so that a molar ratio of a copper ion to a carbonate ion in a mixed solution of both aqueous solutions may be within a range of between 1:1.3 to 2.6;

keeping a temperature of the mixed solution at a level of 95℃ or more without pH control of the mixed solution to produce basic copper carbonate; and

subjecting the basic copper carbonate to solid-liquid separation and washing, to thereby provide the copper electroplating material constituted by the basic copper carbonate.

13. A method for manufacturing basic copper carbonate fed as a copper ion supply to a copper plating bath in copper electroplating, comprising the steps of:

feeding an aqueous cupric sulfate solution and an aqueous solution containing a carbonate ion to a reaction tank while adjusting a feed ratio between both aqueous solutions so that a molar ratio of a copper ion to carbonate ion in a mixed solution of both aqueous solutions may be within a range of between 1:2.3 to 4.6;

keeping a temperature of the mixed solution at a level of 95℃ or more without pH control of the mixed solution to produce basic copper carbonate; and

subjecting the basic copper carbonate to solid-liquid separation and washing, to thereby provide the copper electroplating material constituted by the basic copper carbonate.